

## REMARKS

Reconsideration of the above-identified application is respectfully requested in light of the above amendments and following remarks. Claims 1-10 and 16-18 are in the application and stand rejected. The present amendment seeks to amend claims 1-4 and 16.

In paragraph 3 (on page 2) of the Office action, claims 1 and 2 stand rejected as being anticipated by Truong. The Office action states in part that Truong shows, a dispenser 20 having an upper chamber 211 and a lower chamber 2, upstream opening 24, downstream opening 201, a first powered valve connected to the upstream opening, a second powered valve 231 connected to the downstream opening. Paragraph 3 asserts that, since the valves are actuated from outside, they are considered powered valves, such as man-powered valves. In response, Applicant has amended claim 1 to specify first and second “electrically” powered valves. The amendment to claim 1 also required amendments to claims 2-4 so that references to “powered” valves would become references to “electrically powered” valves. All of these amendments are without prejudice or waiver and should not be construed as agreement with or an admission relating to the rejection. Applicant reserves the right to present these or similar claims in a later filed application. The amendments are merely being made in the interest of expediting prosecution of the present application. It is respectfully submitted that this distinguishes over and is patentable over the “man powered valves” of Hsu.

In light of the above, it is respectfully submitted that claim 1 distinguishes over and is patentable over Hsu. Claim 2 depends from and includes the limitations of claim 1, so it is respectfully submitted that claim 2 distinguishes over and is patentable over Hsu for the same reasons as claim 1. It is therefore requested that the rejection of claims 1 and 2 as being anticipated by Hsu be withdrawn.

In the paragraph following paragraph 3 of the Office action (bearing paragraph number 1), claim 16 stands rejected as being anticipated by Truong or, in the alternative,

as being obvious over Truong in view of Ferguson et al. This paragraph states in part that:

Truong shows a dispenser having a tee connector 31, upper opening, lower chamber, cylinder 42 secured to the upper opening, an upper chamber formed by cylinder 42, the upper chamber having a lower portion 43, plurality of side openings 44, plurality of bottom openings which are defined as the bottom portion of lower portion and the lower portion of the lower chamber unobstructed across its length as seen in figure 1. It should be noted since the claims does not specifically state that the bottom is the bottom surface of the cylindee the limitation "bottom" has been given the broadest interpretation and has been considered the bottom portion of the lower portion of the cylinder.

In response, claim 16 has been amended to specify a "bottom surface" and a "side surface", both having a plurality of openings passing therethrough. All of these amendments are without prejudice or waiver and should not be construed as agreement with or an admission relating to the rejection. Applicant reserves the right to present this or similar claims in a later filed application. The amendments are merely being made in the interest of expediting prosecution of the present application. In light of these amendments, it is respectfully submitted that claim 16 distinguishes over and is patentable over Truong, which does not disclose providing a plurality of openings in the relevant bottom surface. Claim 16 was also amended by changing the reference to a lower "channel" to a lower "chamber" for agreement with that later references within the claim to "said lower chamber." This amendment is unrelated to prior art or to any other rejection of claim 16.

In light of the above, it is respectfully submitted that claim 16 distinguishes over and is patentable over Truong. It is therefore requested that the rejection of claim 16 as being anticipated by Truong be withdrawn.

Claim 16 also stands rejected as being obvious over Truong in view of Ferguson et al. As discussed in more detail below, it is respectfully submitted that claim 16 distinguishes over and is patentable over Truong in view of Ferguson.

The Office action states in part that Ferguson et al. shows another cylinder 7 having holes in the sides and bottoms of the cylinder and asserts that it would have been obvious "to have made the cylinder of Truong's device with a plurality of opening on the

bottom in addition to the ones on the side so as to have a feeding system that will have a greater effect on the water issuing therethrough.” Applicant respectfully traverses this rejection.

Truong provides clear teaching away from such a proposed modification, and to modify Troung in the proposed manner would destroy Troung for its intended purpose. Troung stress providing “vertical” flow openings and, at col. 1, lines 41-45, specifically criticizes prior art devices in which “outlet ports are disposed flat to their flow channels.” Troung criticizes providing outlets ports disposed flat to the flow channels not only as providing for “extremely restricted” flow out but also as causing “unpredictable amounts of the resulting mixtures for distribution to their systems.” At col. 1, line 64, through col. 2, line 1. Truong identifies “two main problems” that his system is designed to solve: “unpredictable amounts of water for dissolving chemical compounds” and “unpredictable amounts of resulting mixtures for distribution to water sprinkler systems.” To solve these problems, Troung discloses using “six equal vertical openings 34 which consist of three vertical inlets 34 faced directly to a direction of water flow as indicated by arrow 37 and three vertical outlets 34 faced opposite to the direction of the water flow.” (Col. 4, lines 7-11). At col. 4, lines 25-29, Truong explains that “[w]hen an user turns on his sprinkler system, the inventing applicator will precisely allow a predetermined portion of water in the horizontal flow channel of the Tee pipe fitting into the three vertical inlets 34.”

It is respectfully submitted that Truong teaches expressly against providing openings in the bottom wall 33 as proposed by the Examiner and to do so would destroy Troung for its essential purpose. Troung teaches that providing openings that are disposed flat to their flow channels introduces unpredictability into the system, and the “two main problems” which Truong was designed to solve are “unpredictable amounts of water for dissolving chemical compounds” and “unpredictable amounts of resulting mixtures for distribution to water sprinkler systems.” It is therefore respectfully submitted that it would not be obvious to modify Troung in the manner suggested by the Examiner.

In light of the above, it is respectfully submitted that claim 16 distinguishes over and is patentable over Truong in view of Ferguson. It is therefore requested that the rejection of claim 16 as being obvious over Truong in view of Ferguson be withdrawn.

In paragraph 3 (on page 3) of the Office action, claims 1-10, 17 and 18 are rejected as being obvious over Truong in view of Hsu. Applicant respectfully traverses this rejection.

Claim 1 calls for "a first electrically powered valve" operably connected to the upstream opening of the dispenser and "a second electrically powered valve" operably connected to the downstream opening of the dispenser. Paragraph 3 of the Office action acknowledges that Truong "does not show a powered valve connected to the openings." Paragraph 3 also states that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added a powered solenoid valves like the ones shown by Hsu to the device of Truong so as to be able to control the flow and the use of the device in an automatic manner."

Hsu discloses a vehicle washing device. The tee connector 10 is supplied with clean water from valve 130 and with cleaning solution from line 41. Between the tee connector 10 and the downstream powered valve 14 is another tee connector 15 that allows for water to be passed through line 150 to the cleaning solution container. Accordingly, Hsu uses two powered valves 11 and 14 to control and route input from two input streams, 41 and the unnumbered stream associated with valve 130, and through two output streams, 150 and the unnumbered stream downstream of valve 14. As explained at, among other places, col. 1, lines 13-14, the separate valves 11 and 14 are used to enable the apparatus to allow "clean water and/or the cleaning solution to pass to an automatic nozzle for washing." The separate powered valves 11 and 14 are needed in Hsu so that the car wash spray nozzle 32 may be supplied with either cleaning solution or with clean water.

In contrast to the vehicle washing apparatus of Hsu, the lawn chemical applicator of Truong is patched into a single water line of a sprinkler system. There is no teaching or suggestion in Truong to switch between delivering either clean water or treated water, and adding upstream and downstream powered valves to Truong would not provide this

capability. Flow to the device of Truong is simply controlled by opening a water supply line to the water sprinkler system.

Truong also teaches against making such a combination. At col. 2, lines 16-21, Truong criticizes the prior art and stresses the need for a device of simple structure that is easy to install, stating:

Some of them are complicated in structure, expensive to build, and inconvenient to install to existing pipe fittings of sprinkler systems. The present invention helps the user solve those problems by installing it directly to any existing Tee pipe fitting of the sprinkler systems. . . . It can be installed at strategically spaced positions of preexisting pop-up sprinklers and will allow the water to mix with and dissolve fertilizers and the like.

Similarly, at col. 2, lines 38-42, in listing specific objects and advantages of the invention, Truong includes “to provide an applicator which is simple and has no moving internal parts” and “to provide an applicator which is low cost and easy to install to any existing position of pop-up sprinklers.” Further still, at col. 4, lines 38-40, Truong explains that “the user may install the inventing applicators at equal distances along their sprinkler pipelines.”

It is respectfully submitted that the references provide very clear teachings against making the attempted combination and no teaching that suggests making the combination. For example, adding powered valves goes against the express teaching of providing an applicator with “no moving internal parts” and goes against the express teaching of providing an applicator that is “low cost and easy to install to any existing position of pop-up sprinklers.” It is further submitted that it would go against the direct teaching of Truong and destroy it for its intended purpose to add the powered valves of Hsu. There would be no motivation to do so because adding the powered valves of Hsu to Truong would not enable Truong to alternate between dispensing either clean water or treated water as the vehicle washing device of Hsu.

In light of the above, it is respectfully submitted that claim 1 distinguishes over and is patentable over Truong in view of Hsu. Claims 2-10 depend ultimately from claim 1 and include the limitations thereof. It is therefore respectfully submitted that claims 2-10 distinguish over and are patentable over Truong in view of Hsu for the same reasons

as claim 1. It is therefore requested that the rejection of claims 1-10 as being obvious over Truong in view of Hsu be withdrawn.

In paragraph 3 (on page 3) of the Office action, claims 17 and 18 also stand rejected as being obvious over Truong in view of Hsu. Applicant respectfully traverses this rejection.

As discussed above, claim 16 specifies that the lower portion of the upper chamber has “a bottom surface with a plurality of openings passing therethrough” and has “a side surface with a plurality of openings passing therethrough . . . .” In paragraph 3 of the Office action, the Examiner states that “Truong shows all of the claimed limitations including an upstream opening and a downstream opening but does not show a powered valve connected to the openings. Hsu shows powered valves in the form of solenoid valves 11 and 14 . . . .” The Examiner also takes the position that the first and second reducer bushings of claim 17 would have been obvious.

It appears that the Examiner has relied upon Hsu for disclosing powered valves 11 and 14 and not for disclosing “a bottom surface with a plurality of openings passing therethrough and having a side surface with a plurality of openings passing therethrough . . . .” It is therefore submitted that claim 16 distinguishes over Truong in light of Hsu for the same reasons discussed above in connection with the rejection of claim 16 as being anticipated by Truong. In particular, Truong does not disclose, teach, or suggest an upper chamber having “a bottom surface with a plurality of openings passing therethrough,” and it does not appear that the Examiner is relying upon Hsu for disclosing this. Claims 17 and 18 both depend ultimately from and contain all limitations of claim 16, so it is respectfully submitted that claims 17 and 18 distinguish over and are patentable over Truong in light of Hsu for the same reasons as claim 16.

In light of the above, it is respectfully submitted that claim 16 distinguishes over and is patentable over Truong in view of Hsu. Claims 17 and 18 depend ultimately from claim 16 and include the limitations thereof. It is therefore respectfully submitted that claims 17 and 18 distinguish over and are patentable over Truong in view of Hsu for the same reasons as claim 16. It is therefore requested that the rejection of claims 17 and 18 as being obvious over Truong in view of Hsu be withdrawn.

It is therefore respectfully submitted that claims 1-10 and 16-18 distinguish over and are patentable over the references of record. Formal notice thereof is respectfully requested. If the Examiner deems that anything else is required to place the application in condition for allowance, the Examiner is invited to contact the undersigned at the numbers given below.

Date: 11-6-03

Respectfully submitted,

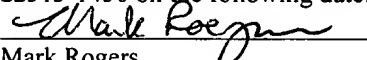


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